



IN THE US PATENT AND TRADEMARK OFFICE
DECLARATION - US PATENT APPLICATION NO. 09/529,873
CAMBRIDGE DISPLAY TECHNOLOGY LIMITED

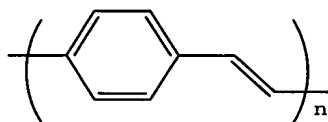
I, Professor Andrew Holmes declare and say as follows.

1. I am Professor Andrew Holmes of 19 Newton Road, Cambridge CB2 2AL, United Kingdom.

2. I received a Ph.D in April 1971 for research in the field of organic chemistry carried out at the University of London. I took up a postdoctoral position with Professor A. Eschenmoser at E.T.H. Zurich until October 1972. I held the position of Assistant Lecturer from 1972 to 1977 and then Lecturer from 1977 to 1994 in the Department of Chemistry at the University of Cambridge. I became the Director of the Melville Laboratory for Polymer Synthesis in October 1994. Since October 1998, I have held the title of Professor of Organic and Polymer Chemistry and was elected a Fellow of the Royal Society in May 2000.

3. I have read and am familiar with the documents referred to as "Antoniadis", "Wan", and "Hsieh" in the detailed action of the USPTO Office Action dated 24th December 2002.

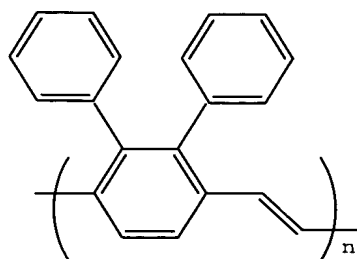
4. Each of these documents discloses DP-PPV which is a polyphenylene vinylene derivative. Polyphenylene vinylene (PPV) has the structure:



5. PPV is an **insoluble** conjugated polymer, i.e. it is not soluble in any solvent.

6. In order for a derivative of insoluble PPV to be rendered soluble, the PPV-derivative must have solubilising groups, which enable the polymer to be dissolved and to be solution processible. A solubilising group could be included in a further repeat unit or as a substituent on the phenylene ring of PPV, for example.

7. The structure of DP-PPV is:



8. DP-PPV has two adjacent phenyl substituents on the phenylene ring of the phenylene vinylene repeat unit. DP-PPV is **insoluble** which indicates that the phenyl substituents do not aid solubility of this polymer.

9. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true.

Andrew B. Holrus
NAME

6th June, 2003
DATE